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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,173	01/18/2002	Gai-Li Jiao	2577-107	9552

6449 7590 04/12/2006

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EXAMINER

HELMER, GEORGIA L

ART UNIT PAPER NUMBER

1638

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/936,173	JIAO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Georgia Helmer	1638	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-8, 10, 11, 13-26, 28 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-8, 10, 11, 13-26, 28 and 30-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Status of the Claims***

1. The Office acknowledges receipt of Applicants Response; dated 9 January 2006.
2. Claims 4-8, 10, 11, 13-26, 28 and 30-36 are pending and are examined in the instant action. .
3. This action is made FINAL.
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112 Enablement***

6. Claims 4-8, 10, 11, 13-26, 28 and 30-36 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, for reasons for record as set forth in the Office Action of 6 May 2004, as well as for reasons set forth in the Office Action of 9 September 2005, and those recited below:

Claims 4-8, 10, 11, 13-26, 28 and 30-36 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of transforming a well-know regenerable and transformable cotton, *Gossypium hirsutum* cv. Coker 312, using explants from fibrous roots of seedlings, and *Agrobacterium tumefaciens*, as taught in the specification, examples 1-4, does not reasonably provide

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enablement for the broad scope of the claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Applicant traverses, saying that independent claim 31, for which each remaining claim depends either directly or indirectly, is directed to “a method for producing a transgenic cotton plant. That method comprises specific steps which can be readily carried out by one of skill in the art upon having the benefit of the present disclosure including (a) preparing explants from fibrous roots of cotton seedlings cultured in medium comprising about 0.05 mg/l to 0.2 mg/l of multi-effect triazole ; (b) culturing said root explants in medium comprising a plant hormone selected from 2,4-dichlororophenoxyacetic acid and alpha naphthalene acetic acid to induce callus formation; (c) transforming said callus with *Agrobacterium tumefaciens* comprising a DNA encoding a chimeric gene of interest of effect the stable transfer of said chimeric gene to the genome of cells comprising the callus tissue; (d) inducing somatic embryos from said transformed callus, and (e) regenerating whole transgenic plants having said gene of interest from said somatic embryos” (Response, p. 2). Applicant follows” “Finally, examples 3 and 4 of the specification provide actual working examples of the claimed method , in which transformed cotton plants were obtained (Response, p. 3). Applicant asserts “that the actual working examples of the claimed method demonstrate that the method is enabled”.

Applicant, responding to the Office's citation of the specification (p. 10 1st sentence) “*Agrobacterium* mediated cotton transformation is considered in the art to be

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heavily variety dependent”, as evidence of lack of enablement, traverses “the Applicant explains that the disclosed method is *believed to have broad applicability* ( emphasis added) to transformation of cotton varieties, as it overcomes or minimizes or overcomes several problems associated with previous work..”. Saying further that “nothing in the assertions of the outstanding Office Action, the prior Office Actions, or the Applicant's general description of the state of the art prior to the date ... filed, provides evidence to support a conclusion ...that the method of claim 31 is not enabled..”. (Response, p. 4)

Applicant's traversal is unpersuasive. The scope of Applicant's claims is broadly drawn to encompass all cotton plants, all culture media comprising multi-effect triazole and naphthalene acetic acid, all *Agrobacterium tumefaciens* strains, all selectable agents and all selective markers. *Applicants teach a method comprising use of fibrous root explants of Coker 312 cotton seedlings, cocultivation with Agrobacterium tumefaciens LBA4404 and production of luciferase-positive plant tissue (specification Table 1, p. 16)*. The Office is unable to locate evidence of a multi-effect triazole treatment of any concentration in the exemplified examples 1-4. The Applicant is encouraged to point out and indicate such information to the Office.

#### **Remarks**

7. No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

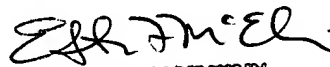
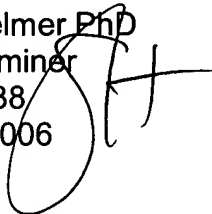
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia Helmer whose telephone number is 571-272-0796. The examiner can normally be reached on 10-6 Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Georgia Helmer PhD  
Patent Examiner  
Art Unit 1638  
27 March 2006



ELIZABETH MCELWAIN  
PRIMARY EXAMINER